Name of Work:- Improvements to roads of Royal Garden Layout in ward no.07 and Improvements to drains of Royal Garden Layout in ward no.07, Byatarayanapura

Estimated Cost:- 80.00 Lakhs

SLNO	DESCRIPTION OF WORK	Unit	N	L	B	D	QTY	RATE	AMOUNT
1	2	3	4	5	6	7	8	9	10
1	KSRRB 300-1. Earthwork excavation by manual means in rodinary soil involving an average horizontal throw upto 2 m and an average lift upto 1.5m, excavated surafce levelled and sides neatly dressed, the disposed earth to be levelled neatly after breaking clods complete as per specifications.. Pg No.143.Item No.19.1)								
	Main road		2	160.00	0.60	0.60	115.20		
	1st cross		2	48.00	0.60	0.60	34.56		
	2nd cross		2	65.00	0.60	0.60	46.80		
	3rd cross		2	110.00	0.60	0.60	79.20		
	4th cross		2	115.00	0.60	0.60	82.80		
	4th A cross		2	41.00	0.60	0.60	29.52		
	Culverts		13	6.00	1.50	0.90	105.30		
	Rain water units		12	(3.14*1.5*1.5)/4		3.00	36.00		
	Overburden		20	1.5	0.9	0.9	24.30		
					TOTAL		**553.68**	137.80	76298.00
	Basic Rate:		**130.00**	cum					
	Area Weightage @ 6%		7.80						
	Total		**137.80**						
2	KSRB 4-1.3: Providing and laying in position plain cement concrete of nominal mix 1:4:8 using 40mm and down size graded granite metal machine mixed, conrete laid in layers not exceeding 15 cms. Thick well compacted in foundation and plinth, including cost of all materials labour, HOM of machinery, curing complete as per specification . **(Pg.No.13, Itr.4.3)**								
	BS Slab drain Bottom								
	Main road		2.00	160.00	0.60	0.15	28.80		
	1st cross		2.00	48.00	0.60	0.15	8.64		
	2nd cross		2.00	65.00	0.60	0.15	11.70		
	3rd cross		2.00	110.00	0.60	0.15	19.80		
	4th cross		2.00	115.00	0.60	0.15	20.70		
	4th A cross		2.00	41.00	0.60	0.15	7.38		
	Culverts- bottom		13.00	6.00	1.50	0.15	17.55		
					TOTAL		**114.57**	5408.12	619609.00
	Basic Rate:		**5102.00**	cum					
	Area Weightage @ 6%		306.12						
	Total		**5408.12**						

3	KSRB4-1.6: Providing and laying in position plain cement concrete of mix 1:2:4 with cement @ 240 kgs, with 20 mm and down size graded granite matel coarse aggregates @ 0.69 cum and fine aggragtes @ 0.459cum, machine mixed concrete laid in layers not eceeding 15 cms, thick well compacted, in foundation, plinth and cills including cost of all materials, labour HOM machinery curing complate as per specifications. (Page No. 13. Item No. 4.6)								
	Culverts		13	6.00	0.60	0.15	7.02		
	coping	13*2	26	6.00	0.60	0.10	9.36		
					TOTAL		**16.38**	5747.32	94141.10
	Basic Rate:		**5422.00**	cum					
	Area Weightage @ 6%		325.32						
	Total		**5747.32**						
4	KSRB 5.4-3: Providing and constructing granite / trap / basalt size stone masonry in superstructure with cement mortar 1:6, edges of stones chistle dressed in courses not less than 15 cms high, bond stones at two m. apart in each course including cost of materials, labour, curing complete as per specifications.KBS 5-1.13 Page No. 25 / Item No. 5.12 /								
	Culvert		26	6.00	0.60	0.90	84.24		
							84.24	6131.04	516479.00
	Basic Rate:		**5784.00**	cum					
	Area Weightage @ 6%		347.04						
	Total		**6131.04**						
5	KSRB 15.1.4: Providing ruled pointing to coursed stone masonry with cement mortar 1:4, 20 mm deep, after raking joints to depth of 20mm nicely lining, including cost of materials, labour, curing complete as per specifications cement mortar 1:4. Page No. 115 / Item No. 15.4 / PWD SR 2018-19								
	Culvert		26	6.00		0.90	140.40		
					TOTAL		**140.40**	148.40	20835.36
	Basic Rate:		**140.00**	sqm					
	Area Weightage @ 6%		8.40						
	Total		**148.40**						
6	Providing granite slabs of selected quality roughly dressed and fixed in cementer mortar (1:6) including fixing curing etc., complete. Pg No.27, Item No.5.31.1 (7.5 cms thick)								
	Side wall and bottom								
	Main road		2.00	160.00	1.35		432.00		
	1st cross		2.00	48.00	1.35		129.60		
	2nd cross		2.00	65.00	1.35		175.50		
	3rd cross		2.00	110.00	1.35		297.00		
	4th cross		2.00	115.00	1.35		310.50		
	4th A cross		2.00	41.00	1.35		110.70		
							1455.30	742.00	1079833.00
	Basic Rate:		**700.00**	sqm					
	Area Weightage @ 6%		42.00						
	Total		**742.00**						

7	Providing and fixing 20 cm thick pre cast RCC covering slab using reinforced cement concrete M 20 mix with stone aggregate 20 mm and down size including centring shuttering reinforcement and bar bending machine mixed concrete laid in layers not exceeding 15 cm thick wellcompacted cost of all materials labour curing comlete as per specification (Data Rate)								
	Culvert			125.00	1.8	0.6	135.00		
							135.00	5111.00	689985.00
8	KSRRB M100-1 Loading and unloading of stone boulder/stone aggregates/ sand/ kanker/ moorum. KSRRB M100-1:Placing tipper at loading point loading with front end loading, dumping turning for return trip, excluding time for haulage and return trip complete as per specification MORTH Chapter 1 (Page 118, item No. 17.1)								
	Basic Rate	cum	**57.00**				4022.68	94.34	379500.00
	Rs. 2.50 Tonne Km.								
	Average Weight of earth 1.28 Tonne/Km.								
	For 10 Km								
	Rs.2.50X1.28TonneX10Km		**32.00**						
	Total		**89.00**						
	Area Weightage @ 6%		5.34						
	Total		**94.34**						
9	KSRRB M2900-2.1. Laying Reinforced cement concrete pipe NP4 / prestressed concrete pipe for culverts on first class bedding of granular material in single row including fixing collar with cement mortar 1:2 but excluding excavation, protection works, backfilling, concrete and masonry works in head walls and parapets complete as per specifications. MORTH Specification No. 2900 B. 1200 mm dia MORTH Specification No. 2900 Page No. 254, Item No. 34.3, PWD SR 2018-19								
	For RWH- 900mm dia		12			3.00	36.00		
					TOTAL		**36.00**	10753.70	387134.00
	Basic Rate:		**10145.00**	cum					
	Area Weightage @ 6%		608.70						
	Total		**10753.70**						
10	Providing 100mm and down size nominal size. (Pg No.I.Item No.23)								
	For RWH- PITS		12	(3.14*1.2*1.2)/4		1.20	14.40		
					TOTAL		**14.40**	987.62	14222.00
11	Providing 40mm and down size nominal size (Pg No.II.Item No.25)								
	For RWH- PITS		12	(3.14*1.2*1.2)/4		0.60	7.20		
					TOTAL		**7.20**	1091.43	7859.00
12	Providing 20mm and down size nominal size (Pg No.Ii.Item No.28)								
	For RWH- PITS		12	(3.14*1.2*1.2)/4		0.40	4.80		
					TOTAL		**4.80**	1091.43	5239.00
13	Providing Fine aggrgate 2.36mm nominal size (Pg No.Ii.Item No.37)								
	For RWH- PITS		12	(3.14*1.2*1.2)/4		0.30	3.60		

						TOTAL	**3.60**	1054.29	3796.00
14	Providing and fixing MS Grating 260x260 mm(Page No.1X, Sl No.234, code No.0771)								
	For RWH- PITS		12	2.00			24.00		
						TOTAL	**24.00**	89.84	2157.00
	Basic Rate:		**84.75**	nos					
	Area Weightage @ 6%		5.09						
	Total		**89.84**						
15	KSRRB M300- Scarifying Existing Granular Surface to a Depth of 50mm by Manual Means. KSRRB M300-52.1. Scarifying the existing granular road surface to a depth of 50mm and disposal of scarified material and complete as per specifications. MORTH Specification No. 305.4.3 with all lead and lift , loading and unloading and allother incidental charges etc., complete as per specification and direction of the engineer-in-charge of the work(P-146., It No: 19.58)								
	Asphalt road								
	Main road		1	155.00	7.00		1085.00		
	1st cross		1	45.00	6.50		292.50		
	2nd cross		1	65.00	6.50		422.50		
	3rd cross		1	110.00	6.50		715.00		
	4th cross		1	115.00	6.00		690.00		
	4th A cross		1	44.00	6.00		264.00		
						TOTAL	**3469.00**	31.80	110314.20
	Basic Rate:		**30.00**	sqm					
	Area Weightage @ 6%		1.80						
	Total		**31.80**						
16	KSRRB M300-53. Construction of embankment with approved material Gravel/Murrum with all lifts and leads, transporting to site, spreading, grading to required slope and compacting to meet requirement Table 300-2 complete as per specifications.(which includes cost of gravel / murrum, watering charges & compaction by vibratory roller)(P-147., It No: 19.60)								
	Main road		1	155.00	7.00	0.30	325.50		
	1st cross		1	45.00	6.50	0.30	87.75		
	2nd cross		1	65.00	6.50	0.30	126.75		
	3rd cross		1	110.00	6.50	0.30	214.50		
	4th cross		1	115.00	6.00	0.30	207.00		
	4th A cross		1	42.00	6.00	0.35	88.20		
						TOTAL	**1049.70**	344.50	361622.00
	Basic Rate:		**325.00**	cum					
	Area Weightage @ 6%		19.50						
	Total		**344.50**						

17	Providing laying, spreading and compacting graded fine aggregate to wet mix macadam specificationns including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed method of tipper to site, laying in uniform layers with paver in sub-base/base course on well prepared surfce and compating with vibratory roller to achieve the desired density complete as per specifications. MORTH specifications no. 406(P-155., It No: 20.18)								
	Asphalt road								
	Main road		1	155.00	7.00	0.23	249.55		
	1st cross		1	45.00	6.50	0.23	67.28		
	2nd cross		1	65.00	6.50	0.23	97.18		
	3rd cross		1	110.00	6.50	0.23	164.45		
	4th cross		1	115.00	6.00	0.20	138.00		
	4th A cross		1	44.00	6.00	0.23	60.72		
					TOTAL		**777.17**	2001.28	1555335.00
	Basic Rate:		**1888.00**	cum					
	Area Weightage @ 6%		113.28						
	Total		**2001.28**						
18	KSRRB 500-07: Providing and applying primer coat with S.S Bitumen emulsion on prepared surfaces of granular base such as WMM including cleaning of road surface and spraying primer at the rate of 0.6okg/sqm using mechanical means complete as per specifications.. (Pg No. 158. Item No. 21.6)								
	Asphalt road								
	Main road		1.00	155.00	7.00		1085.00		
	1st cross		1.00	45.00	6.50		292.50		
	2nd cross		1.00	65.00	6.50		422.50		
	3rd cross		1.00	110.00	6.50		715.00		
	4th cross		1.00	115.00	6.00		690.00		
	4th A cross		1.00	44.00	6.00		264.00		
							3469.00	29.68	102960.00
	Basic Rate:		**28.00**	sqm					
	Area Weightage @ 6%		1.68						
	Total		**29.68**						
19	Providing and laying bituminous concrete40MM thick with hotmix plant, using crushed aggregates of specified grading, premixed with bituminous binder and filleeer, transporting of specified grading, premixed with bituminous binder and filler, transporting the hot mix to work site, laying with paver finisher to the required gradde, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to acheive the desired compaction as per MORTH specifications clause No.509 complete in all respects complete as per specifications. using 40/60 TPH capacity H.M.P with mechanical paver Gr-11(30mm to 45mm) with 5.4% of modified binder consisting of 4.97% VG-10 bitumen (80/100) grade and 0.43% of plastomeric thermoplastics(Waste plastic)(Page No.170, It No.21.78.6)								
	Asphalt road								
	Main road		1.00	155.00	7.00	0.04	43.40		

	1st cross		1.00	45.00	6.50	0.04	11.70		
	2nd cross		1.00	65.00	6.50	0.04	16.90		
	3rd cross		1.00	110.00	6.50	0.04	28.60		
	4th cross		1.00	115.00	6.00	0.04	27.60		
	4th A cross		1.00	44.00	6.00	0.04	10.56		
							138.76	7929.86	1100348.00
	Basic Rate:		**7481.00**	cum					
	Area Weightage @ 6%		448.86						
	Total		**7929.86**						
								Sub Total	7127666.66
								Add 12% GST Charges	855320.00
								Miscelleneous charges	17013.34
								Grand Total	8000000.00

1	This is certified that the work spot comes under BBMP limits only.		
2	The work spot is inspected by me		
3	The items Provided in the Estimate are quite Essential		
4	The rates are as per CSR of 2018-19 year of PWD Bangalore Circle.		

Asst.Engineer

Asst.Exe.Engineer

Executive Engineer

Administrative Approval

Accorded For Rs:80.00 Lakhs
Head of A/C 2-3250
CER NO : 58 Dt: 28/03/19

E.E. (Project)

Technical Sanction

Accorded For Rs:80.00 Lakhs
Head of A/C 2-3250
CER NO : 185 Dt: 17/01/2019

TA CE (YNK)